



Great Lakes Dredge & Dock Company

Dredge Material Processing Plan

Lower Passaic River Study Area Project

Dredging / Solidification / Capping Service

Dredge Material Processing Planrev3	
DREDGING, STABILIZATION AND CAPPING RIVER MILE 10.9 TCRA	
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We certify that the submittal has been reviewed, checked and approved for compliance with the Contract Document	

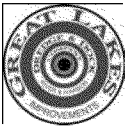


Table of Contents

1.0 INTRODUCTION 3

2.0 PROCESSING EQUIPMENT/PERSONNEL4

3.0 DREDGE MATERIAL PROCESSING WORK PLAN4

4.0 PROCESSED DREDGE MATERIAL (PDM) & DECANT WATER LOADING & TRANSPORT OPERATIONS .. 7

5.0 ENVIRONMENTALCONTROLS – PROCESS FACILITY OPERATIONS 10

6.0 ANTICIPATED PRODUCTION AND DAILY OPERATIONS.....12

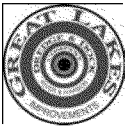
Attachments

ATTACHMENT “A” PERMITS13

ATTACHMENT “B” PROCESS AND TREATMENT EQUIPMENT PROFILE 14

ATTACHMENT “C” DECANT WATER STORAGE TANK CUT SHEET16

ATTACHMENT “D” EQUIPMENT LOCATION PLAN 18



1.0 INTRODUCTION

Great Lakes Dredge and Dock, LLC (GLDD, LLC) is pleased to present this Dredge Material Processing Plan to describe the methodologies, labor, services, material, equipment, tools and supervision necessary to complete the decanting, off-loading, processing, treatment, staging, and trans-shipment of approximately 19,600 in-situ cubic yards (CY) of targeted material from the RM 10.9 Removal Area for transport to an off-site designated disposal facility. Work will be performed in accordance with the requirements outlined in the final Technical Specifications and Contract Drawings.

The material to be removed includes concentrations of polychlorinated dibenzo-pdioxins/polychlorinated dibenzofurans (PCDDs/PCDFs), polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), mercury, and other chemicals of concern (COCs).

CEDT Koppers DMPF Facility

To accomplish the requirements for processing of material from the LPR Mile 10.9 project ("Project"), GLDD sub-contractor, Clean Earth Dredging Technologies, LLC ("CEDT") will operate its "fixed base" dredged material processing and transfer facility located on the Hackensack River in Kearny, NJ. The "Koppers DMPF" site is a waterfront parcel consisting of approximately twenty (20) leased acres with nearly 350 feet of waterfront berth access. The address of the facility is below:

Koppers Dredged Material Processing Facility (DMPF)
1 Fish House Rd
Kearny, NJ 07032

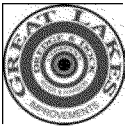
As stated in the companion Dredging and Operational Plan, the GLDD dredging unit and associated production rates have been developed to fit the prescribed project duration. Based upon the conservative assumptions presented therein, the production rate is estimated to average approximately 630-cubic yards per day. This anticipated rate results in the requirement to transport one loaded transport barge per shift to the processing facility.

It is anticipated that the processing facility will work daylight work hours, 6-days per week, with modifications as necessary due to Project or task-specific requirements.

The site operates pursuant to numerous permits listed below:

- NJDEP Air Pollution Control Permit No. PCP090001
- NJ Meadowlands Commission Conditional Zoning Certificate File No. 04-319
- NJDEP Stream Encroachment Permit DEP File # 0907-02-003.3 FHA040001
- Hudson-Essex-Passaic Soil Conservation District – Soil Erosion & Sediment Control
- Plan Approval No. 207-H-2480
- NJDEP AUD modification

Copies of the permits are contained in **Attachment A**.



2.0 PROCESSING EQUIPMENT/PERSONNEL

The execution of this portion of the work scope requires the use of specialized equipment and experienced personnel. The personnel team consists of operational, technical and supervisory staff that possesses multiple years of combined experience and is very familiar with the project due to a thorough review of the project specifications, drawings and site characteristics.

Please refer to the diagram labeled “Process and Treatment Equipment Profile” in **Attachment B** for a general visualization and description of system methods and process flows only. Pictures of the process equipment are presented below in Section 3.0.

3.0 DREDGE MATERIAL PROCESSING WORK PLAN

CEDT Treatment Process

CEDT will use its proven material handling and solidification/stabilization (S/S) treatment processes to produce processed dredged material (PDM) at the Koppers DMPF that will be rendered stable for transportation and improved workability upon arrival at the landfill. The process uses common treatment reagents (Portland cement) to achieve the target treatment characteristics. Admixture selection is described further in the Mix Design Formulation section below.

Receipt of Scows/Decanting/Dewatering

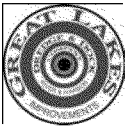
After dredging, each work scow (barge) will be transported by tug down the Passaic River and up the Hackensack River to the Kearny DMPF facility. Upon arrival at the DMPF waterside, each loaded work scow will be moored securely against the North Dock of the DMPF facility using a series of winches and cables/ropes.

Since free water will not be discharged at the dredging site location, the initial step in processing of raw sediments from this Project is the decanting of free water from the dredged sediments at the DMPF. The loaded scows of dredged material received at the treatment facility will likely contain excess free water which must be removed from the barges prior to offloading of the sediments. This decanting operation is accomplished by first providing an adequate period of mooring to allow solids to settle in the barge. After the initial barge settling period, portable pumps will be utilized to pump the water to land based tanks (i.e., frac tanks and/or holding scows) for temporary storage.

Barge de-watering (decanting) equipment will consist of portable sumps, hoses, and pumps, and a series of storage/settling tanks (frac tanks), and a particulate (bag) filter. Water decanted from the barges will be pumped using hydraulic and centrifugal pumping systems through a quick connect hose piping system into a series of manifolded 21,000-gallon portable storage/settling tanks (a cut sheet for the tanks is included in **Attachment C**). The stored decant water will be removed via vacuum tankers by others for off-site transport and disposal in accordance with the Specifications.

Debris Removal

It is generally necessary to remove oversize debris (vegetative matter, pilings, scrap metal, tires, etc.) from the dredge material prior to processing. Screening is accomplished by a 4-deck cascading vibratory mechanical screen mounted to



the feed hopper of the processing plant. Debris and oversize material greater than 4 inches in diameter will be removed from the raw dredged material. Any debris sorted at the processing facility will be placed into designated storage areas which will be provided with containment to prevent loose sediment from being mobilized by rainwater or containerized for future off-site transport and disposal by others (the T&D subcontractor) in accordance with the Specifications. Over-size debris removed separately at the dredge location will be off-loaded from barges separately at the Koppers DMPF and will be moved directly to designated storage areas or will be containerized for off-site transport and disposal by others (the T&D subcontractor) in accordance with the Specifications

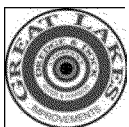


Material Handler feeding debris removal system

Mix Design Formulation

As part of its work scope for the Project, GLDD assisted in the arrangement of a Dredge Sediment Solidification Study for the Project in March 2013 utilizing composite samples of raw sediment collected by CH2MHill at the TerraSense, LLC Geotechnical Testing Laboratory located in Totowa, NJ. The treatability study report is contained as an attachment to the NJDEP Acceptable Use Determination Application (see **Attachment A – Permits: AUD**). Based on the results of the Sediment Solidification Study, it is anticipated that a range of 8% to 12% of Portland Cement is adequate to achieve design criteria for transport to the landfill facility. For the Project, it is anticipated that an average 10% mixture by weight, of dry Portland cement to the raw sediment as received at the DMPF (by wet weight after decanting operations) will be utilized for this project to achieve solidification and stabilization needed for transport. As much as 12%, by wet weight, Portland cement may be added if the sediment exhibits higher than anticipated moisture content.

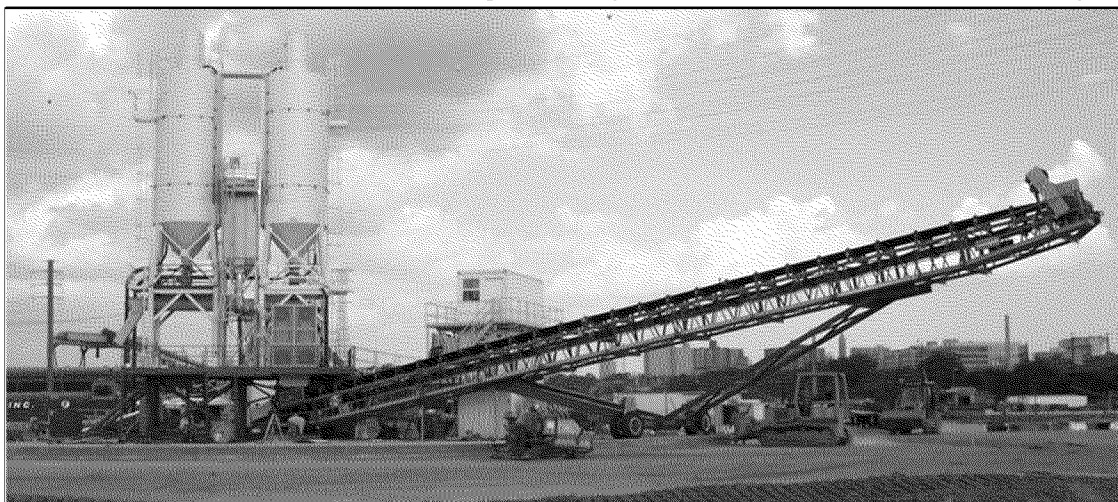
The programmable logic control (PLC) on the DMPF processing system will ensure that the mix design recipe for proper S/S of the DM is applied on a continuous basis.



Raw Dredged Material Processing

During dredge material processing, loaded barges are moored firmly to the bulkhead of the DMPF, and off-loading and dewatering equipment is located on the dock platform. A long-reach hydraulic “material handler” excavator, equipped with a 4.5 to 5-cubic yard hydraulic clamshell bucket, will be used to stevedore material from the hopper scows into the feed hopper (see photo on p. 5). A spill protection (spill plate) is a permanent part of the process system that reaches between the work barge and the offloading platform, under the excavator bucket and is tilted toward the barge so that any material spilled during offloading will flow back into the barge. The spill plate will be scraped routinely during offloading to prevent buildup of material. The feed hopper discharges material to the screening plant and into the pugmill blending chamber via the feed conveyor system. Within the pugmill-blending chamber, the raw sediment is thoroughly mixed with additives supplied to the pugmill from the attached dry-bulk additive silos at pre-determined mix ratios. The silos are equipped with required air pollution control devices including a dust control baghouse. The pugmill system contains counter-rotating twin augers, driven by electric powered 150 HP motors, with a throughputs ranging from 250 to 800 tons per hour of PDM. From the pugmill, the stabilized material is discharged to a radial-stacking conveyor that deposits the PDM into three (3) concrete “product” stockpile/storage bins.

The Portland cement used to stabilize the dredge material will be delivered to the facility by pneumatic truck transport. The materials will be stored in two conventional storage vertical pneumatic silos/tanks until used in the process.



The system involves no storage of raw dredged material other than in barge prior to processing.

It is anticipated that material processing operations will occur over a single, 8-hour shift per day, during daylight hours, 6 days per week. The facility is permitted to operate 24 hours per day, 7 days per week. Receipt of scows and decanting operations may occur on a 24 hours per day, 7 days per week basis.

Stockpiling and Staging

The three (3) existing concrete “product” stockpile/storage bins at the DMPF site will be utilized as the primary temporary storage and staging areas for PDM after processing and prior to shipment offsite for disposal. In addition to the product storage bins, the existing operating AUD for the Koppers DMPF allows for creation of supplemental areas for



temporary storage of processed dredged material (PDM), which will be constructed as necessary to accommodate staging of PDM.

The attached figure labeled "Equipment Location Plan," included in **Attachment D**, depicts these locations. If necessary, the processed dredged material will be removed from the concrete "product" stockpile/storage bins, and will be transported in end-dump vehicles to the temporary PDM storage areas. The concrete storage bins and any temporary storage areas will be available for interim storage of processed dredged material during QC testing and prior to off-site transport by others. Specific PDM batches may also be segregated in this area pending results of confirmatory testing.

4.0 PROCESSED DREDGE MATERIAL (PDM) & DECANT WATER LOADING & TRANSPORT OPERATIONS

Processed Sediment Transport & Disposal

Once sediment has been solidified/stabilized at the Koppers DMPF, in accordance with the Specifications and has passed the required QA/QC sampling requirements, the separately contracted transport and disposal (T&D) subcontractor, Clean Harbors Environmental Services ("CHES"), will be responsible for the transportation of the sediment to its ultimate disposal facility. The CHES logistics provider, EPIC/Synagro, will provide the front drayage services to the EPIC Brills Yard located at 319 P. Avenue in Newark, New Jersey. The Brills Yard will be the truck to rail transfer point for the intermodal containers.

The means of transportation will be in EPIC Intermodal Containers (see cut sheet attached in **Attachment E**) transported by roll-off truck chassis to the intermodal rail transfer station in Newark, NJ, and then by intermodal rail car transport to the CHES Lone Mountain Landfill facility in Waynoka, Oklahoma.

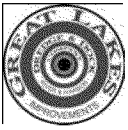
EPIC's containers utilize a robust semi-rigid cover that withstands the environment during transport to preserve the integrity of the contents. EPIC also uses a specially-designed tractor/trailer configuration that provides for increased payload which translates to fewer trips to the disposal site.

In the event of a release at any point in transit, both CHES and EPIC, as well as the Class I railroad or short line railroad, have emergency response systems in place to promptly and efficiently to mitigate the incident. Once loaded, the T&D Subcontractor's response systems will take precedence.

QA/QC Testing of Processed Sediment Materials

Processed materials will be tested for physical quality assurance in accordance with the Specifications at a rate of one sample per 400 to 800 CY (corresponding to a processing batch). The processed dredged material analysis will be run on an immediate rush turnaround basis by qualified personnel, either on-site or in an off-site third party laboratory. Each stabilized batch of sediment (for each one day of processing) will be cured for 24 hours (cure time may be shortened by CH2MHill upon review of initial results) and tested for the following:

Free Liquids by Paint Filter Test (EPA SW-846 Method 9095), after the sample is vibrated for 15 minutes at 50 Hz on a vibratory table as prescribed in ASTM D4253, Methods 1B or 2B.



Results will be reported to CH2M HILL and its T&D Subcontractor representative for review. A testing summary sheet with the corresponding batch number will be provided to the designated reviewers. It is understood that CH2M HILL will provide written concurrence that the material is "pre-qualified" and may be loaded for transport within 24 hours of receipt of acceptable confirmatory test results (sooner if possible).

If QA/QC or confirmatory results indicate the material is non-conforming with the requirements of the specification, the material will be reprocessed and/or allowed to cure longer and re-tested until the specifications for shipment are met.

The T&D Subcontractor's Transportation Coordinator/representative will also be given the opportunity to visually inspect all pre-qualified material to ensure that all material is acceptable prior to loading onto their transportation vehicles. Any material that is rejected by CH2M HILL or is suspected of not meeting the project specifications after stabilization (by either CH2MHill or The T&D Subcontractor) will be retained in a stockpile until confirmatory results are received or a release for shipment is granted by CH2MHill.

CHES will not perform any monitoring prior to taking of the loads nor while in transit.

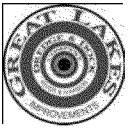
Coordinating the delivery of containers

The DMPF Site Supervisor will coordinate daily delivery schedules and times with the T&D Subcontractor Transportation Coordinator.

Inclement weather will not routinely cause delays to the loading procedures unless the impacts of such weather are deemed to be causing adverse effects on-site or off-site of the DMPF premises. In such case, or in case of extreme weather circumstances, the DMPF Facility Manager will be empowered to shut down loading operations and determine the restart time. The Contractor representative and the T&D Subcontractor's Transportation Coordinator will be notified immediately of any weather related effects on loading and the schedule adjusted accordingly.

Processed Dredged Material Load-out

The processed sediment will be loaded out from the product storage bins or intermediate storage areas into the T&D Subcontractor supplied EPIC intermodal containers, delivered to the DMPF on over-road truck chassis. Upon arrival at the DMPF site, trucks will be directed to a designated staging area to have tarps removed for loading. From the staging area the Transportation Coordinator will direct the next truck in cue for loading to the Staging, Loading and Tarping Area ("SLT Area"). It is anticipated that HDPE liners will be installed at the EPIC Brills Yard prior to delivery of each container to the DMPF site. Upon arrival at the SLT, each truck and container will be un-tarped, inspected and lined (as necessary) with an HDPE liner prior to loading. The truck will then proceed to the PDM stockpile storage area, where the stabilized sediment material will be loaded directly into the lined intermodal containers. Loading will occur on a concrete, asphalt or compacted stone base immediately adjacent to the concrete bins. The truck will then be transported to the on-site scale to be weighed. If the payload is deemed to be light or heavy by the T&D Subcontractor the truck will return to the stockpile storage area to have additional PDM loaded or removed. This cycle will repeat until the desired ship weight is reached. Bills of lading provided by the T&D subcontractor will be distributed to each driver for signature, with appropriate copies retained at the process site. Upon reaching weight, the truck will be tarped at the SLT Area, tires or sideboards cleaned of excess material, and the truck will exit the DMPF to be transported to the off-site intermodal rail yard facility.



At the intermodal rail yard, each container will be transferred to rail car chassis for rail transport to the landfill. Once at the landfill, the containers will be transferred from the rail cars to straight roll off trucks for delivery and discharge within the landfill facility.



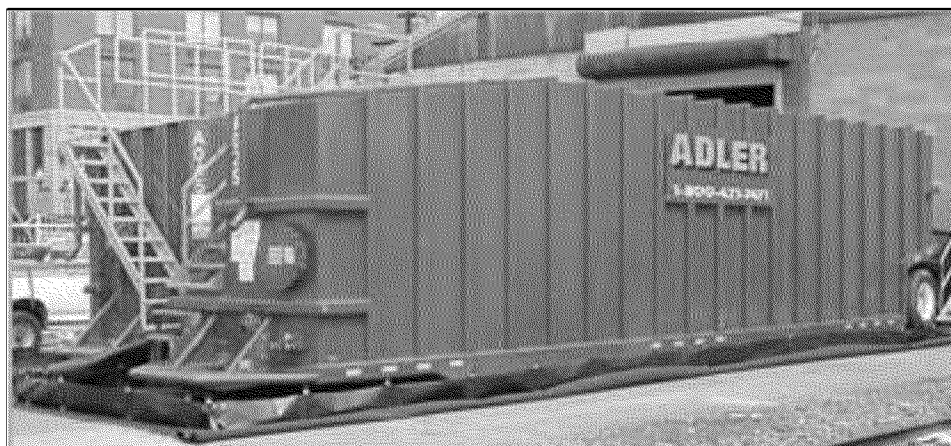
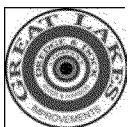
Typical Layout for Tarping and Lining Station

Decant Water Storage & Load-Out

Once decant water has been stored and polished through the particulate filter in accordance with the Specifications, the T&D Subcontractor, CHES, will be responsible for the transportation of the water to its ultimate disposal facility. Clean Harbors has stated that it will employ a fleet of vacuum transporter/trailers consisting of Company-owned assets supplemented by a select list of approved transporters who meet the Company's rigid safety standards. Drivers will complete a pre-load and pre-trip inspection to ensure that the transport equipment is suitable for service. Any equipment suspected or found to be in need of maintenance will be immediately removed from the project and serviced accordingly.

Upon arrival at the DMPF site, CHES tanker trucks will be directed to a designated staging area. From the staging area the CHES Transportation Coordinator will direct the next truck in cue for loading to the Dewatering Storage Area (see **Attachment D** for location). Each vacuum tanker driver will make the necessary connection to the polished decant water tank and will pneumatically offload water into its tank. Bills of lading provided by the T&D Subcontractor will be distributed to each driver for signature, with appropriate copies retained at the process site. Upon reaching a full tank load, the tanker suction will be shut down, suction hoses removed, and the truck will be inspected prior to exiting the DMPF to be transported to the off-site disposal facility.

In the event of a release at any point in transit, both CHES and its fleet transporters have emergency response systems in place to promptly and efficiently to mitigate the incident. Incidents will be immediately reported to the CH2M HILL Project Manager.



5.0 ENVIRONMENTAL CONTROLS – PROCESS FACILITY OPERATIONS

Mile 10.9 Sediment Material Segregation at the DMPF

Based on project-specific conditions associated with the Mile 10.9 Project and anticipated regulatory requirements to segregate the LPR Mile 10.9 materials from other project materials, CEDT anticipates it will dedicate the entire operations of the specified processing and storage facilities at the Koppers DMPF to the LPR Mile 10.9 media for the duration of the Project. All sediment, decant water, and processed/stabilized sediment will be kept separate and distinct and will not be commingled with other project sediments or treated sediments at the DMPF facility. As such there will be no need to differentiate between incoming dredging projects on an ongoing basis.

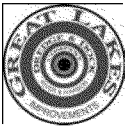
Should the Mile 10.9 Project experience unforeseen delays or need to be interrupted for any reason, the DMPF repurposing and decontamination procedures below will be employed prior to switching to an alternate project, and again at the conclusion of the Mile 10.9 Project once work on the Project resumes.

Equipment and Methods utilized for Control and Monitoring of Air Emissions during Processing

The processing of the LPR Mile 10.9 material proposed at the Koppers site takes place in an enclosed pugmill processing system, where dry bulk Portland cement is delivered from sealed pneumatic silos directly into the dredged material stream and blended thoroughly under negative air drawn through a dust collector. As such the potential to emit is significantly reduced versus open-air mixing processes.

Air Pollution Control

The existing Air Pollution Control Permit (NJDEP No. PCP090001) for the Koppers site utilizes predictive models based on maximum constituent concentration inputs along with projected processing throughput rates (hourly, daily, annual) to determine allowable levels of each chemical constituent within each dredged material source to be processed. Based on a review of data provided for the Project, the Air Permit was updated and revised to include project-specific conditions for acceptance of the LPR Mile 10.9 Project. Final negotiations for LPR Mile 10.9 project-specific modifications to the Air Pollution Control Permit for the Koppers DMPF will not take place until after publication of this document. However,



since the sediment to be dredged for this Project meets the existing permit limits for acceptance at the Koppers DMPF, no additional active air monitoring is anticipated for this Project.

A copy of the final Air Pollution Control Permit will be inserted in **Attachment A** upon issuance by NJDEP.

Dust Control

Dust releases at the processing facility shall be minimized at all times, including during nonworking periods, utilizing best management practices. All activities will be performed in strict accordance with applicable Air Quality Standards. Additive storage silos are equipped with permitted air pollution control devices (baghouse dust collectors) in order to minimize the potential for dust release during conveyance of the dry bulk admixtures to the dredged material. Routine inspections of baghouse elements and filters are performed to ensure proper operation.

The dredged material at the site, haul roads, and other areas disturbed by operations are misted or treated with dust suppressants as necessary to mitigate the potential for a release. Speed limits have been established for all equipment and vehicles at the site to minimize dust generation from vehicular traffic.

Staging of PDM

As discussed above, it is anticipated that the three (3) existing concrete "product" stockpile/storage bins at the DMPF site will be utilized as the primary temporary storage and staging areas for PDM after processing to accommodate staging of PDM during curing and prior to off-site transport.

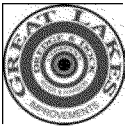
The PDM is anticipated to be stockpiled in 400 to 800 CY segregated batched storage stockpiles for a limited time at the DMPF (up to 72 hours) until subsequent re-loading onto commercial transport trucks. The PDM will then be trans-loaded by loaders or hydraulic excavators into transport vehicles for over-the-road transportation to one or more off-site disposal facilities by others in accordance with the Specifications.

Decontamination of Equipment contacted by Derived Media

Upon suspension or completion of the Mile 10.9 operations the DMPF facility will be decontaminated for re-purposing to other dredging projects.

The equipment utilized to manage and load processed sediment, including scows, offloading equipment, the processing plant and other handling equipment used for the Project will be subject to mechanical decontamination procedures. All equipment will be bucket, shovel-and-broom cleaned to remove remnants of any sediment solids. The raw and processed sediment generated by the equipment decontamination process will be consolidated for transport and disposal by others at the CHES Lone Mountain disposal facility.

The equipment utilized to handle the decanted water from the loaded scows will be subject to decontamination as well. The settling tanks will have all sediment removed and consolidated for transport and disposal by others at the CHES Lone Mountain disposal facility. The pumps, hoses, filters and tanks will be subject to decontamination utilizing pressure washing equipment. The rinse water generated during decontamination procedures will be containerized for transport and disposal by others to the CHES Baltimore facility.



All expendable materials (including liners, PPE, silt fence, hay bales, filter bags, etc.) will be properly containerized for transport and disposal by others in accordance with Technical Specification Section 01 45 55 – Environmental Protection.

Hazardous Waste Management

All sediments, decant water, and processed dredged material to be handled from the Project have been pre-characterized by the Contractor to be non-hazardous waste. In the unlikely event that any Subcontractor-generated hazardous wastes are identified during decontamination at the processing facility, these wastes will be stored in approved containers (49 CFR 178) in accordance with NJ hazardous waste regulations (NJAC 7:26G), properly labeled to identify the type of waste, and dated as to when the container was filled. Containers will be removed from the project site, stored, and disposed of as hazardous waste in accordance with NJAC 7:26G. All materials will be transported and disposed of in strict accordance with all applicable State, Federal or local regulations and the Technical Specifications, including prior approval by CH2M HILL of transportation and disposal firms.

Prevention of Cross-contamination

To mitigate the potential for cross-contamination and/or tracking of processed dredged materials onto public roadways, vehicles will be loaded adjacent to, but not within the temporary staging area. All vehicles will be inspected to ensure that tires are clean and cleaned as necessary before they are allowed to exit the DMPF facility. Additionally, SESC measures are in place at the facility including improved roadways and tracking pads.

Lining and Tarping Station

Part of the processing facility modifications for this Project includes the installation and operation of a lining and tarping station. The station will consist of a temporary scaffolding system as depicted on page 9 above which shall be able to accommodate two trucks at a time for inspection and lining of containers as necessary upon arrival at the DMPF facility and prior to loading. The station will also serve as the platform for tarping of each intermodal container vehicle immediately after loading with processed sediment and prior to exiting the DMPF site. Liners, tarps and straps/cords provided by the T&D Subcontractor in accordance with the Project Specifications.

The operation will also include the weighing of each loaded vehicle on a truck deck scale prior to tarping to ensure proper trucks loads have been secured.

6.0 ANTICIPATED PRODUCTION AND DAILY OPERATIONS

The Specifications call for 750 tons per day to be removed by the T&D Subcontractor. The processed dredged material will be loaded onto approximately 34 to 35 separate intermodal container vehicles supplied by the T&D Subcontractor each work day (averaging a minimum of 23 tons per vehicle).

Loading will take place from 6:00 a.m. to 2:30 pm, Monday to Saturday, each week. Based on 8 operating hours per day it is estimated the average loading time for each truck will be 13 minutes, loading 34-35 trucks per day.



ATTACHMENT "A" PERMITS



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHRIS CHRISTIE
Governor

OFFICE OF DREDGING AND SEDIMENT TECHNOLOGY
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Lt. Governor

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Mr. Steven Sands
Clean Earth Dredging Technologies, Inc.
334 South Warminster Road
Hatboro, PA 19040

June 27, 2013

RE: Acceptable Use Determination (AUD)
Source: Lower Passaic River Mile 10.9 Study Contract

Dear Mr. Sands:

This letter is forwarded in response to your request, dated May 10, 2013 for an Acceptable Use Determination (AUD) for the above referenced dredging contract. The application requested authorization to allow for the processing of approximately 19,600 cy of dredged material from the above referenced contract areas at the Clean Earth Dredging Technologies Facilities located in Kearny, New Jersey. The AUD application was subsequently amended via letter, dated June 20, 2013 to provide additional information in response to comments raised by the Department on the original application.

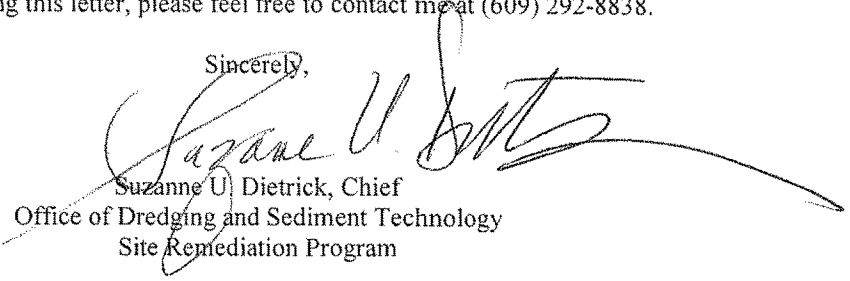
The AUD application states that the processed dredged material will be transported from the processing facility to a secure Subtitle C landfill facility at Lone Mountain in Waynoka, Major County, Oklahoma under a separate contract between the Cooperating Parties Group (CPG) and CH2MHill's subcontractors. In addition, any decant water generated during the processing of the material from the contract will be handled under a separate contract with CPG and CH2MHill's subcontractors. Thus, this AUD authorization only serves to address the 1) decant water discharge into holding tanks 2) off-loading of the dredged material, and the processing of the material from the contract. The following conditions are imposed on the project.

ACCEPTABLE USE DETERMINATION

1. The dredged material from this contract shall be processed using a minimum of 8% portland cement at the designated processing facility consistent with the testing of the material as provided in the AUD application and other analytical testing of the sediments as provided by the CPG in separate documentation submitted to the Department.
2. The designated off-loading and processing facilities shall comply with all conditions imposed in the Stream Encroachment Permit/Waterfront Development Permit/Acceptable Use Determination and any subsequent modifications or renewals thereto for the dredged material processing and/or off-loading facility.
3. All processed dredge material shall remain in the concrete product bins prior to offsite disposal under a separate contract between CPG and CH2MHill's subcontractor.
4. Clean Earth shall implement the Equipment Decontamination procedures detailed in the AUD application and as required by Condition #2, Facility Specific Requirements in the Air Pollution Control Preconstruction Permit and Certificate to Operate Revision (PCP130002 Program Interest No: 12943). A detailed report of the procedures implemented shall be submitted to the Office of Dredging and Sediment Technology.

If you have any questions regarding this letter, please feel free to contact me at (609) 292-8838.

Sincerely,



Suzanne U. Dietrick, Chief
Office of Dredging and Sediment Technology
Site Remediation Program

C: Janine MacGregor, SRP
Jay Nickerson, SRP

**Air Pollution Control****State of New Jersey****DEPARTMENT of ENVIRONMENTAL PROTECTION**

Division of Air Quality

Bureau of Air Permits

401 E. State Street, 2nd floor, P.O. Box 420, Mail Code 401-02

Trenton, NJ 08625-0420

**Preconstruction Permit and Certificate to Operate
Revision**CHRIS CHRISTIE
*Governor*KIM GUADAGNO
*Lt. Governor*BOB MARTIN
*Commissioner***Permit Activity Number: PCP130002****Program Interest No: 12943**

Mailing Address	Plant Location
DAN MORROW CLEAN EARTH DREDGING TECHNOLOGIES INC 334 S WARMINSTER RD HATBORO, PA 19040	CLEAN EARTH DREDGING TECHNOLOGY INC Fish House Rd Kearny Town Hudson County, New Jersey

Approval Date: 06/27/2013**Expiration Date: 05/28/2014**

The New Jersey Department of Environmental Protection (Department) has reviewed the above referenced air pollution control permit application. On the basis of the information provided, the Department concludes that the application satisfies all applicable requirements of the New Jersey Air Pollution Control regulations codified at N.J.A.C. 7:27 et seq. This Air Pollution Control Permit modification shall supersede any existing Air Pollution Control Permits issued for the specified source. This permit allows for inspection and evaluation of the equipment by the Department to assure conformance with all provisions of N.J.A.C. 7:27 et seq. and any other applicable federal requirements codified at 40 CFR 52, 60, 61 and 63.

This approval changes certain portions of the previously approved preconstruction permit, and this action does not change the current expiration date of the permit. This approval results in a permit that has replaced the one previously issued, Activity Number PCP 090001

The equipment, that is authorized to be installed and operated under this approval, is described in Section A, Source Operations and Section D, Equipment Inventory. Equipment at the facility referenced by this Permit shall be operated in accordance with the Conditions of Approval set forth in Section D, Facility Specific Requirements.

The Department hereby issues this permit and certificate under the authority of chapter 106, P.L. 1967(N.J.S.A 26:2C-9.2). You may construct, reconstruct, install, or modify the above referenced equipment and/or control apparatus consistent with the approval.

The approved Permit is available for download in PDF format which contains the facility's specific requirements (compliance plan) at: <http://www.nj.gov/dep/aqpp>. After accessing the web site, click on "Approved PCP Permits" listed under "Reports" and then type in your Program Interest (PI) Number, 12943, as instructed on the screen. You will be able to view, print or electronically store your permit. If you have any questions regarding this permit

Revision 1.1
01/31/2011

approval, please contact the Department at the Preconstruction Permit Help Line available from 9:00 AM to 4:00 PM daily, where you may speak to someone about any technical questions you may have. The Preconstruction Permit Technical Help Line number is 609-292-6716.

If, in your judgment as an applicant for an air pollution control permit, the Department is imposing any unreasonable Condition of Approval, you may contest the Department's decision and request a contested case hearing pursuant to the Administrative Code at N.J.A.C. 7:27-1.32(a). All requests for contested case hearings must be received in writing by the Department within twenty (20) calendar days of the date you receive this permit approval and must contain the information specified in the Administrative Hearing Request Checklist and Tracking Form.

If you have any non technical questions please use the Bureau's number 609- 292-0834. If you have any questions when filing a General Permit please use the General Permit Help number 609-633-2829.

Approved by:

A handwritten signature in cursive script, appearing to read "William Kuchne".

William Kuchne
Environmental Engineer 4 (Supervisor)
Preconstruction Permits

Administrative Hearing Request Checklist and Tracking Form

I. Document Being Appealed

Name of the Facility	Facility ID Number	Permit Activity Number	Issuance Date
CLEAN EARTH DREDGING TECHNOLOGY INC	12943	PCP130002	

II. Contact Information

Name of Person Requesting Hearing	Name of Attorney (if applicable)
Address:	Address:
Telephone:	Telephone:

III. Please include the following information as part of your request:

- A. The date the permittee received the permit decision;
- B. Two printed copies of the document being appealed – for submitting to address 1 below;
A PDF copy of the document being appealed on a CD – for submitting to address 2 below
- C. The legal and factual questions you are appealing;
- D. A statement as to whether or not you raised each legal and factual issues during the permit application process;
- E. Suggested revised or alternative permit conditions;
- F. An estimate of the time required for the hearing;
- G. A request, if necessary, for a barrier-free hearing location for physically disabled persons;
- H. A clear indication of any willingness to negotiate a settlement with the Department prior to the Departments processing of your hearing request to the Office of Administrative Law;

Mail this form, completed, signed and dated with all of the information listed above, including attachment, to:

1. New Jersey Department of Environmental Protection
Office of Legal Affairs
Attention: Adjudicatory Hearing Requests
401 E. State Street, P.O. Box 402
Trenton, New Jersey 08625
2. Air Quality Permitting Element
Preconstruction Permits
New Jersey Department of Environmental Protection
401 E. State Street, 2nd Floor, P.O. Box 027
Trenton, New Jersey 08625
Phone: (609) 633-2829

Signature

Date

Revised 05/21/2009

Administrative Hearing Request Checklist and Tracking Form

IV. If you are not the applicant but rather an interested person claiming to be aggrieved by the permit decision, please include the following information:

1. The date you or your agent received notice of the permit decision (include a copy of that permit decision with your hearing request);
2. Evidence that a copy of the request has been delivered to the applicant for the permit which is the subject of the permit decision;
3. A detailed statement of which findings of fact and/or conclusion of law you are challenging;
4. A description of your participation in any public hearings held in connection with the permit application and copies of any written comments you submitted;
5. Whether you claim a statutory or constitutional right to a hearing, and, if you claim such a right, a reference to the applicable statute or explanation of how your property interests are affected by the permit decision;
6. If the appeal request concerns a CAFRA permit decision, evidence that a copy of the request has been delivered to the clerks of the county and the municipality in which the project which is the subject of the permit decision is located;
7. Suggested revised or alternative permit conditions;
8. An estimate of the time required for the hearing;
9. A request, if necessary, for a barrier-free hearing location for physically disable persons;
10. A clear indication of any willingness to negotiate a settlement with the Department prior to the Department's transmittal of the hearing request to the Office of Administrative Law;

Mail this form, completed, signed and dated with all of the information listed above, including attachment, to:

New Jersey Department of Environmental Protection
Office of Legal Affairs
Attention: Adjudicatory Hearing Requests
401 East State Street, P.O. Box 402
Trenton, New Jersey 08625-0402

Air Quality Permitting Element
Preconstruction Permits
New Jersey Department of Environmental Protection
401 E. State Street, 2nd Floor, P.O. Box 027
Trenton, New Jersey 08625
Phone: (609) 633-2829

Signature

Date

AIR POLLUTION CONTROL PRECONSTRUCTION PERMIT

Table of Contents

Facility Name: CLEAN EARTH DREDGING TECHNOLOGY INC

Facility ID No.: 12943

Permit Activity No.: PCP130002

Section A

AUTHORIZED SOURCE OPERATIONS

Section B

ACRONYMS

Section C

GENERAL PROVISIONS AND AUTHORITIES

Section D

PERMIT INFORMATION

AIR POLLUTION CONTROL PRECONSTRUCTION PERMIT

Section A

Facility Name: CLEAN EARTH DREDGING TECHNOLOGY INC

Facility ID No.: 12943

Permit Activity No.: PCP130002

AUTHORIZED SOURCE OPERATIONS

This Preconstruction Permit and the Certificate to Operate for the following equipment is issued pursuant to N.J.A.C. 7:27-8.

Description of Source Activity

Source Operation Type: Processing up to 66,000 tons [dry] of Lower Passaic River Mile 10.9 and up to 1,100,000 tons [dry] of NY-NJ Harbor dredge sediment, per calendar year, separately without being comingled or mixed at any time.

Source Operation Description: Dredgesediment is unloaded from barges and conveyed through a screening plant where it's separated from timber, large debris, rocks and scrap metals. The screened dredge sediment is thereafter conveyed to a pug mill at a maximum rate of 375 tons [dry] per hour it's stabilized with bulk additive materials before being disposed off-site in railroad cars or trucks.

Source Operation Details: The sources authorized by this permit shall be operated within the parameters specified in the Equipment, Control Device, and/or Emission Unit/Batch Process Operating Scenario Details of this permit. Operation of the authorized sources within these parameters is required in addition to compliance with the conditions specified in Section D— Facility Specific Requirements.

AIR POLLUTION CONTROL PRECONSTRUCTION PERMIT

Section B

Facility Name: CLEAN EARTH DREDGING TECHNOLOGY INC

Facility ID No.: 12943

Permit Activity No.: PCP130002

ACRONYMS

BTS	Bureau of Technical Services
CEMS	Continuous Emissions Monitor System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMS	Continuous Opacity Monitor System
EPA	United States Environmental Protection Agency
HAP	Hazardous Air Pollutant
N.J.A.C.	New Jersey Administrative Code
NJDEP	New Jersey Department of Environmental Protection
NOx	Oxides of Nitrogen
PM-2.5	All particulate matter having an aerodynamic diameter less than or equal to a nominal 2.5 microns
PM-10	All particulate matter having an aerodynamic diameter less than or equal to a nominal 10 microns
PST	Performance Specification Test
REO	Regional Enforcement Office - NJDEP
SO ₂	Sulfur Dioxide
TSP	Total Suspended Particulate Matter
VOC	Volatile Organic Compounds

AIR POLLUTION CONTROL PRECONSTRUCTION PERMIT

Section C

Facility Name: CLEAN EARTH DREDGING TECHNOLOGY INC

Facility ID No.: 12943

Permit Activity No.: PCP130002

GENERAL PROVISIONS AND AUTHORITIES

Preconstruction Permits

1. Notwithstanding compliance with other provisions of N.J.A.C. 7:27-1 et seq., no person shall cause, suffer, allow or permit to be emitted into the outdoor atmosphere substances in quantities which shall result in air pollution as defined at N.J.A.C. 7:27-5.1. [N.J.A.C. 7:27-5.2(a)]
2. The permittee shall not construct, reconstruct, install, or modify a significant source or control apparatus serving the significant source without first obtaining a preconstruction permit under N.J.A.C. 7:27-8. [N.J.A.C. 7:27-8.3(a)]
3. The permittee shall not operate (nor cause to be operated) a significant source or control apparatus serving the significant source without a valid operating certificate. [N.J.A.C. 7:27-8.3(b)]
4. Permit Revisions:

The permittee shall not take any action which requires a permit revision, compliance plan change, seven-day-notice change, amendment, or change to a batch plant permit, under any applicable provision at N.J.A.C. 7:27-8.17 through 8.23, without complying with that applicable provision.

The following summarize N.J.A.C. 7:27-8.18 through 8.21:

- a. The permittee shall file a permit revision request and receive approval from the Department prior to increasing any maximum allowable emission limit, increasing actual emissions, to a rate or concentration greater than a maximum allowable emission, causing the emissions of a new air contaminant, use a new raw material, reconstructing equipment, change the ground level concentration of an air contaminant in an area where the public has access, replace the permitted source, or constructing or installing a new significant source. [N.J.A.C. 7:27-8.18]
- b. The permittee shall file a compliance plan change request and receive approval from the Department prior to decreasing the frequency of testing, monitoring, recordkeeping, or reporting, changing the monitoring method, changing a level, rate, or limit of an operational parameter included in the conditions, or reducing a source's potential to emit. [N.J.A.C. 7:27-8.19]
- c. At least seven days prior to proceeding with a physical or operational change that is outside the scope of activities allowed by this permit, but will not increase emissions over the allowable emissions and will not alter the stack characteristics, the permittee shall file a seven-day-notice change. The permittee may proceed with the proposed changes seven days after such notice is filed with the Department. [N.J.A.C. 7:27-8.20]

Revised 05/21/2009

- d. The permittee shall file an amendment within 120 days of making any change of the information contained within Section C of this permit (Facility Profile), changing the name, number or designation of any equipment or stack covered by this permit, changing the parameters of a stack in such a way to reduce the ground level concentration of an air contaminant, or correction of a typographical error that will not result in an increase of actual or allowable emissions. [N.J.A.C. 7:27-8.21]

The permittee shall review the provisions of N.J.A.C. 7:27-8.18 through 7:27-8.21 to determine the appropriate type of request to file.

5. The permittee shall make the preconstruction permit or certificate, together with any amendments, seven-day-notices, or other documents related to the permit and certificate, readily available for Department inspection on the operating premises. [N.J.A.C. 7:27-8.3(d)]
6. The permittee shall not use or cause to be used the equipment or control apparatus unless all components connected or attached to, or serving, the equipment or control apparatus, are functioning properly and are in compliance with the preconstruction permit and certificate and all conditions and provisions thereto. [N.J.A.C. 7:27-8.3(e)]
7. A preconstruction permit is not transferable either from the location authorized in the preconstruction permit to another location, or from any one piece of control apparatus or equipment to another piece of control apparatus or equipment. [N.J.A.C. 7:27-8.3(f)]
8. Once a permit or certificate is issued, the permittee is fully responsible for compliance with N.J.A.C. 8:27-8 and with the permit and certificate, including adequate design, construction, and operation of the source, even if employees, contractors, or others work on or operate the permitted source. If the Department issues any other requirement with the force of law, such as an order, which applies to the source, the permittee is also responsible for compliance with that requirement. [N.J.A.C. 7:27-8.3(g)]
9. Preconstruction permits and certificates do not any way relieve the permittee from the obligation to obtain necessary permits from other government agencies and to comply with all other applicable Federal, State, and local rules and regulations. [N.J.A.C. 7:27-8.3(h)]
10. The permittee shall not suffer, allow, or permit any air contaminant detectable by the sense of smell, to be present in the outdoor atmosphere in such quantity and duration which is, or tends to be, injurious to human health or welfare, animal or plant life or property, or would unreasonably interfere with the enjoyment of life or property. This shall not include an air contaminant which occurs only in areas over which the permittee has exclusive use or occupancy. In determining whether an odor unreasonably interferes with the enjoyment of life or property, the Department shall consider all of the relevant facts and circumstances, including, but not limited to, the character, severity, frequency, and duration of the odor, and the number of persons affected thereby. In considering these and other relevant facts and circumstances, no one factor shall be dispositive, but each shall be considered relevant in determining whether an odor interferes with the enjoyment of life or property, and, if so, whether such interference is unreasonable considering all of the circumstances. [N.J.A.C. 7:27-8.3(j)]

11. The Department and its representatives have the right to enter and inspect any facility or property in accordance with N.J.A.C. 7:27-1.31. [N.J.A.C. 7:27-8.3(m)]
12. There shall be an affirmative defense to liability for penalties for a violation of a preconstruction permit or certificate occurring as a result of an equipment malfunction, an equipment start-up, an equipment shutdown, or during the performance of necessary maintenance. The affirmative defense shall be asserted and established as required pursuant to P.L. 1993. c.89 (adding N.J.S.A. 26:2C-19.1 through 2C-19.5) and any rules the Department promulgates thereunder, and shall meet all of the requirements thereof. There shall also be an affirmative defense to liabilities for penalties or other sanctions for noncompliance with any technology based emission limitation in this permit or certificate, if the noncompliance was due to an emergency as defined at N.J.A.C. 7:27-22.1, provided that the affirmative defense is asserted and established in compliance with 40 CFR 70.6(g) and meets all requirements thereof. [N.J.A.C. 7:27-8.3(n)]
13. The permittee shall not cause or use the equipment specified in a preconstruction permit in a manner that will result in the emission of any air contaminant not listed in the Facility Specific Requirements in this Preconstruction Permit at a rate equal to or higher than the applicable reporting threshold set forth at N.J.A.C. 7:27-8 Appendix I, Table A or B. [N.J.A.C. 7:27-8.4(k)1]
14. No air contaminant, or category of air contaminant, where accepted by the Department, shall be emitted other than those approved in the preconstruction permit. [N.J.A.C. 7:27-8.13(a)]
15. Any person to whom the Department has issued a preconstruction permit or certificate shall comply with all terms and conditions of any order related to the preconstruction permit or certificate. [N.J.A.C. 7:27-8.13(a)]
16. The permittee shall maintain all records required in the preconstruction permit for a period of five (5) calendar years from the calendar year within which the record was generated. [N.J.A.C. 7:27-8.13(a)]
17. The Department may change the conditions of approval of any approved certificate to operate at the time of renewal of a temporary operating certificate; at the time of approval or renewal of a five-year operating certificate; or at any time during the period a certificate is in effect, if the Department determines that such change is necessary to protect human health or welfare or the environment. [N.J.A.C. 7:27-8.13(b)]
18. Upon request of the Department, the permittee shall submit to the Department information relevant to the operation of equipment and control apparatus including all information specified at N.J.A.C. 7:27-8.13(c). [N.J.A.C. 7:27-8.13(c)]
19. If the conditions of a preconstruction permit or certificate to operate require the Department to incur any of the following charges, the permittee shall reimburse the Department for the full amount of these charges: (1) The charges billed by any phone company for the maintenance of a dedicated telephone line required by this permit or the certificate to operate for the electronic transmission of data; or (2) The charges billed by any laboratory for performing the analysis of audit samples collected pursuant to testing or monitoring required by this permit or the certificate to operate. [N.J.A.C. 7:27-8.13(g)]
20. Any exceedance of the operating requirements or emission concentrations specified in a preconstruction permit shall be reported within three (3) business days, by writing to the Regional Enforcement Office. [N.J.A.C. 7:27-8.13(h)]

21. The permittee shall, when requested by the Department, provide such testing facilities exclusive of instrumentation and sensing devices as may be necessary for the Department to determine the kind and amount of air contaminants emitted from the equipment or control apparatus. The testing facilities shall include the utilities, the structure to hold testing equipment and/or personnel, and any ports in stacks needed to carry out testing required by this permit. During testing by the Department, the equipment and control apparatus shall be operated under such conditions within their capacities as may be requested by the Department. The test facilities may be either permanent or temporary, at the discretion of the person responsible for their provision, and shall conform to all applicable laws, regulations, and rules concerning safe construction and safe practice. Testing facilities, which contain platforms and other means of personnel access, shall conform to OSHA standards. [N.J.A.C. 7:27-8.13(i)]
22. Upon request of the Department, the permittee shall submit to the Department any record relevant to any permit or certificate. Such records shall be submitted to the Department within thirty (30) days of the request by the Department or within a longer time period if approved in writing by the Department. [N.J.A.C. 7:27-8.15(a)]
23. The permittee shall submit any required report in a format and on a schedule approved by the Department. Such report shall be transmitted on paper, on computer disk, or electronically, at the discretion of the Department. [N.J.A.C. 7:27-8.15(b)]
24. Any report submitted to the Department, including but not limited to, a report submitted as an amendment of this permit or the certificate to operate pursuant to N.J.A.C. 7:27-8.3(c) shall include, as an integral part of the report, certifications complying with N.J.A.C. 7:27-1.39. [N.J.A.C. 7:27-8.15(c)]
25. Upon request of the Department, the permittee shall report on forms obtained from the Department the air contaminant actual emissions and information relevant thereto, of any air contaminant or category of air contaminant emitted by the equipment, control apparatus, or source operation. [N.J.A.C. 7:27-8.15(d)]
26. Any emission limit values in a preconstruction permit shall be interpreted to be followed by inherent trailing zeros (0) in the decimal portion of the limit to three significant figures (e.g. a printed limit of "1 lb/hr" means a limit of "1.00 lb/hr").
27. This listing of requirements reflects the state rules and regulations that apply to a majority of sources. If a specific requirement in a rule or regulation that applies to a permittee is not included in this section or in the Facility Specific Requirements it does not relieve the permittee from the obligation to comply with that regulation.
28. Process monitors must be operated at all times when the associated process equipment is operating except during outage time allowed by Department guidelines/procedures or as outlined in Technical Manual 1005. The Permittee must keep a service log as required.

29. The following Department offices may be referenced in a preconstruction permit. Please use the following addresses when submitting any correspondence to these offices:

Bureau of Technical Services
P. O. Box 437
380 Scotch Road
West Trenton, NJ 08625

Central Regional Enforcement Office
P. O. Box 407
Trenton, NJ 08625-0407

Northern Regional Enforcement Office
7 Ridgedale Avenue
Cedar Knolls, NJ 07927

Southern Regional Enforcement Office
2 Riverside Drive – Suite 201
Camden, NJ 08102

30. In accordance with the Air Pollution Control Act at N.J.S.A. 26:2C-19(e), any operation of the equipment which may cause off-property effect, including odors, shall be immediately reported by calling the NJDEP Environmental Action Hotline at (877) 927-6337.
31. In accordance with N.J.A.C. 7:27-21, facilities are required to submit annual emission statements of their actual emissions if the Potential-to-emit for the entire facility exceeds the following thresholds (including all emissions from the facility, both permitted and unpermitted). Additional information about Emission Statement reports can be obtained by calling (609) 984-5483.

<u>AIR CONTAMINANT</u>	<u>Threshold in Tons per Year</u>
VOC (Volatile Organic Compounds)	10
NO _x (Oxides of Nitrogen)	25
CO (Carbon Monoxide)	100
SO ₂ (Sulfur Dioxide)	100
TSP (Total Suspended Particulates)	100
PM _{2.5} (Particulate Matter ≤ 2.5 microns)	100
PM ₁₀ (Particulate Matter ≤ 10 microns)	100
NH ₃ (Ammonia)	100
Lead	5

32. In accordance with N.J.A.C. 7:27-22, facilities are required to submit a Title V Operating Permit application, within one year, if the potential-to-emit for the entire facility exceeds any of the following thresholds (including all emissions from the facility, both permitted and unpermitted). Additional Information about Operating Permits can be obtained by calling the Operating Permit Hotline at (609) 633-8248.

<u>AIR CONTAMINANT</u>	<u>Threshold in Tons per Year</u>
VOC (Volatile Organic Compounds)	25
NO _x (Oxides of Nitrogen)	25
CO (Carbon Monoxide)	100
SO ₂ (Sulfur Dioxide)	100
TSP (Total Suspended Particulates)	100
PM ₁₀ (Particulate Matter ≤ 10 microns)	100
Lead	10
Any HAP (Hazardous Air Pollutant)	10
All HAPs Collectively	25
Any other Air Contaminant	100

AIR POLLUTION CONTROL PRECONSTRUCTION PERMIT

Section D

Facility Name: CLEAN EARTH DREDGING TECHNOLOGY INC

Facility ID No.: 12943

Permit Activity No.: PCP130002

PERMIT INFORMATION

FACILITY SPECIFIC REQUIREMENTS INDEX

FACILITY SPECIFIC REQUIREMENTS

REASON FOR APPLICATION

FACILITY PROFILE (GENERAL)

EQUIPMENT INVENTORY

CONTROL DEVICE INVENTORY

EMISSION POINT INVENTORY

EMISSION UNIT/BATCH PROCESS INVENTORY

AIR POLLUTION CONTROL PRECONSTRUCTION PERMIT

Section D

Facility Name: CLEAN EARTH DREDGING TECHNOLOGY INC

Facility ID No.: 12943

Permit Activity No.: PCP130002

FACILITY SPECIFIC REQUIREMENTS INDEX

PCP130002

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Emission Unit: U1 Processing of dredge material through a pugmill.

CD1 IAC 120TB-BHT-49:S6

Subject Item:

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The Baghouse must be running at all time when dredge sediment is being processed in the pug mill. [N.J.A.C. 7:27- 8.13(a)]	Monitored by visual determination once per calendar day during operation. [N.J.A.C. 7:27- 8.13(d)4]	Recordkeeping by manual logging of parameter or storing data in a computer data system once per calendar day during operation when the baghouse is shutdown due to malfunctioning or for repair &/or maintenance, including any measures taken prior to resuming operation. All monitoring records shall be kept on-site or at the permittee's main offices, for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8.13(d)3]	None.
2	Particulates Control Efficiency \geq 99 % or 0.02 grain per dry standard cubic feet (gr/dscf). [N.J.A.C. 7:27- 6]	Particulates Control Efficiency: Monitored by documentation of construction once initially of baghouse manufacturer or vendor's TSP-PM maximum removal efficiency specifications. [N.J.A.C. 7:27- 8]	Particulates Control Efficiency: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. All documentation shall be kept on-site or at the permittee's main offices, for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8]	None.
3	Blower Extraction Rate \geq 5,400 and Blower Extraction Rate \leq 6,060 ACFM The Baghouse must operate under negative pressure, sealed and integrated as one unit with the pug mill (E5) and the pug mill feed conveyor (E2). [N.J.A.C. 7:27- 8]	Blower Extraction Rate: Monitored by documentation of construction once initially of blower manufacturer-vendor specifications and performance data indicating the unit is designed to operate at a constant speed drive within the permitted air flow range and ambient conditions. [N.J.A.C. 7:27- 8]	Blower Extraction Rate: Recordkeeping by manual logging of parameter or storing data in a computer data system once per calendar day during operation indicating that no dredge sediment is being processed in the pug mill while the blower is shutdown due to malfunction or for repair &/or maintenance, or when the blower air throughput deviates from permitted levels, including any preventive measures taken prior to resuming operation. All monitoring records shall be kept on-site or at the permittee's main offices, for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8]	None.

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	The bagfilters shall be cleaned by a counterflow sequential jet of compressed air set on a timed-cycle basis according to the manufacturer's recommendations and specifications. [N.J.A.C. 7:27- 8.13(a)]	Monitored by visual determination once per calendar day during operation ensuring the proper operation of the bagfilter cleaning system. The self cleaning shall be automatic: A continuous self clean is performed and discharge going to each bagfilter individually on the manufacturer's recommended timed-cycle. If the bagfilter cleaning system automatically shuts off or is interrupted, due to a malfunction, the processing of dredge sediment in the pug mill should stop immediately, until the permittee determines the cause of the automatic cleaning system's failure, and implement corrective measures prior to resuming the processing of dredge sediment. [N.J.A.C. 7:27- 8.13(d)2]	Recordkeeping by manual logging of parameter or storing data in a computer data system once per calendar day during operation either confirming the proper operation of the automatic filter cleaning system or indicating any disruptions or failures, subsequent halting of processing dredge sediment and associated corrective measures taken, if any. All records shall be kept on-site, or at the permittee's main office, for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8.13(d)3]	None.
5	The permittee shall check the bagfilter for any wear, tear or damage to the dust collection and transport systems structural integrity in accordance with the filter vendor or manufacturer's recommended inspection guidelines and specifications, as applicable. [N.J.A.C. 7:27- 8]	Monitored by documentation of construction at the manufacturer's specified frequency, based on a 12 calendar month period consisting of baghouse manufacturer-vendor's cleaning, maintenance, inspection and replacement schedules along with facility operator's logs. [N.J.A.C. 7:27- 8]	Recordkeeping by manual logging of parameter or storing data in a computer data system at the manufacturer's specified frequency based on a 12-calendar month period, upon performing routine filter inspection and maintenance or replacement. The permittee shall record the day and time when baghouse filters are cleaned, maintained and/or replaced. All records shall be kept on-site or at the permittee's main offices, for at least five (5) years, and readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8]	None.

PCP130002

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	Pressure Drop Across the Baghouse ≥ 2 inches w.c. and ≤ 20 inches w.c., at all times during operation. Immediate corrective action shall be taken if the pressure drop deviates from this range. [N.J.A.C. 7:27- 8.13(a)]	Monitored by pressure drop instrument continuously. The permittee shall install a pressure gauge to monitor the pressure drop across the bagfilters and visually inspect the pressure gauge at a minimum daily during operation by following the filter manufacturer recommended inspection and replacement schedules. If the pressure drop across the bagfilters exceeds permit limits, the processing of dredge sediment in the pug mill must stop immediately. The permittee shall then determine the cause of the baghouse pressure drop deviation from permit limits and shall take corrective measures prior to re-starting the processing of dredge sediment. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. [N.J.A.C. 7:27- 8.13(d)2]	Recordkeeping by manual logging of parameter or storing data in a computer data system once per calendar day during operation when the pressure drop across the bagfilters deviates from permit limits, including any actions taken to correct the pressure drop. All records, including any corrective actions taken, shall be kept on-site or at the permittee's main office for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8.13(d)3]	None.
7	Air-to-Cloth Ratio ≤ 7.55 ACFM/sq.ft.. [N.J.A.C. 7:27- 8]	Air-to-Cloth Ratio: Monitored by documentation of construction once initially and per change of filter manufacturer specifications or facility operator's logs indicating cloth area and calculated air-to-cloth ratio. [N.J.A.C. 7:27- 8]	Air-to-Cloth Ratio: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially and per change of filter material specifications. All monitoring records shall be kept on-site or at the permittee's main office for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8]	None.

PCP130002

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Emission Unit: U1 Processing of dredge material through a pugmill.

Subject Item: CD3 Water Spray Bar

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The water spray system shall be installed and used on the amended dredge sediment conveyor (E6) as needed. [N.J.A.C. 7:27- 8]	Monitored by visual determination once per calendar day during operation ensuring that water spray is visible at the spray bar locations when needed. [N.J.A.C. 7:27- 8]	Recordkeeping by manual logging of parameter or storing data in a computer data system once per calendar day during operation that water sprays are functioning properly along with any maintenance performed on the water sprays. All records shall be kept onsite or at the permittee's main office for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8]	None.
2	The permittee shall immediately stop processing dredge sediment in the pug mill and conveying amended dredge material if the water flow needed through the spray nozzles is insufficient or discontinued. [N.J.A.C. 7:27- 8]	Monitored by visual determination once per calendar day during operation ensuring that water spray bars are fully operable prior to processing dredge sediment in the pug mill or conveying amended dredge material before it's carried away. [N.J.A.C. 7:27- 8]	Recordkeeping by manual logging of parameter or storing data in a computer data system once per calendar day during operation when "water spray bars" are not used due to the following: i) Date when there is no water flowing through the spray nozzles; ii) Date of stoppage of operations; iii) Type of corrective measures taken; iv) Date when water is restored to the spray bars; and v) Date of resuming operations. All records shall be kept onsite or at the permittee's main office for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8]	None.

CLEAN EARTH DREDGING TECHNOLOGY INC (12943)

Date: 6/27/2013

PCP130002

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Emission Unit: U1 Processing of dredge material through a pugmill.
Subject Item: E5 840 ton per hour (wet) pugmill mixing unit with enclosed mixing box

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The pug mill shall have no openings except one (1) point of discharge or outlet at the bottom. The pug mill lids shall be screwed onto the pug mill base and gasketed with neoprene or equal sealing material. [N.J.A.C. 7:27- 8]	Monitored by visual determination once initially, based on an instantaneous determination. [N.J.A.C. 7:27- 8]	None.	None.

PCP130002

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Emission Unit: U1 Processing of dredge material through a pugmill.

OS Summary

Operating Scenario:

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Dredge sediments from the Passaic RM 10.9 and from the NY-NJ Harbor shall be processed separately without being comingled or mixed at any time. [N.J.A.C. 7:27- 8]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system annually based on a 12-calendar month period. The permittee shall keep the following records: i) Sources of dredge sediment processed at the facility; and ii) Dates of switching between the two (2) sources of dredge sediment, in each calendar month per year, on site or at the permittee's main office for at least five (5) years, readily made available to the Department upon request. [N.J.A.C. 7:27- 8]	None.
2	Process equipment used to process dredge sediment from the Passaic RM 10.9 must each time be decontaminated prior to being used to process dredge sediment from the NY-NJ Harbor , and vice-versa if necessary. [N.J.A.C. 7:27- 8]	Monitored by documentation of construction annually, based on a 12 calendar month period of facility operator's logs specifying the kind of decontamination procedures applied. [N.J.A.C. 7:27- 8]	Recordkeeping by manual logging of parameter or storing data in a computer data system annually based on a 12-calendar month period, of facility operator's logs specifying the kind of decontamination procedures applied and dates of completion. The permittee shall keep all records on site or at the permittee's main office for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8]	None.
3	VOC (Total) <= 3.48 tons/yr. [N.J.A.C. 7:27- 8]	VOC (Total): Monitored by calculations annually, based on a 12 calendar month period when VOC (total) and SVOC (total) concentrations in dredge sediment from either the Passaic RM 10.9 and/or the NY-NJ Harbor increase above the levels initially reported by the permittee. [N.J.A.C. 7:27- 8]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually based on a 12-calendar month period, of dredge sediment analytical laboratory sampling & testing results, and associated VOC (total) and SVOC (total) emissions calculations, including the designations of NY-NJ Harbor and Passaic River Mile 10.9 dredging areas. All records shall be kept on-site, or at the permittee's main office, for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8]	None.

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	TSP <= 1.76 tons/yr. [N.J.A.C. 7:27- 6]	TSP: Monitored by calculations annually, based on a 12 calendar month period when the percent moisture (%M) in dredge sediment from either the Passaic RM 10.9 and/or the NY-NJ Harbor decrease below 50% as initially reported by the permittee. [N.J.A.C. 7:27- 8]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system annually based on a 12-calendar month period, of dredge sediment analytical laboratory sampling & testing results, and associated TSP-PM emissions calculations, including the designations of NY-NJ Harbor and Passaic River Mile 10.9 dredging areas. All records shall be kept on-site, or at the permittee's main office, for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8]	None.
5	PM-10 (Total) <= 1.68 tons/yr. [N.J.A.C. 7:27- 6]	PM-10 (Total): Monitored by calculations annually, based on a 12 calendar month period when the percent moisture (%M) in dredge sediment from either the Passaic RM 10.9 and/or the NY-NJ Harbor decrease below 50% as initially reported by the permittee. [N.J.A.C. 7:27- 8]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually based on 12-calendar month period, of dredge sediment analytical laboratory sampling & testing results, and associated PM-10 emissions calculations, including the designations of NY-NJ Harbor and Passaic River Mile 10.9 dredging areas. All records shall be kept on-site, or at the permittee's main office, for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8]	None.
6	Amount of NY-NJ Harbor dredge sediment processed <= 1,100,000 tons (dry) per calendar year. [N.J.A.C. 7:27- 8.13(a)]	Monitored by material feed/flow monitoring annually, based on a 12 calendar month period where the amount of NY-NJ Harbor dredge sediment (dry) processed at the facility shall be determined based on its percent water content or moisture level (%M) and the following: i) Shipment manifest data; ii) Bill of lading, iii) Material Invoice receipts or iv) Weighing logs. [N.J.A.C. 7:27- 8.13(a)]	Recordkeeping by manual logging of parameter or storing data in a computer data system annually based on a 12 calendar month period. The permittee shall record the amount of NY-NJ Harbor dredge sediment received per each shipment delivery or weight of dredge sediment processed and its minimum percent moisture level, in each calendar month per year. All records shall be kept on site or at the permittee's main office for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8.13(d)3]	None.

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	Amount of Passaic RM 10.9 dredge sediment processed <= 66,000 tons (dry) per calendar year. [N.J.A.C. 7:27- 8.13(a)]	Monitored by material feed/flow monitoring annually, based on a 12 calendar month period where the amount of Passaic RM 10.9 dredge sediment (dry) processed at the facility shall be determined based on its percent water content or moisture level (%M) and the following: i) Shipment manifest data; ii) Bill of lading, iii) Material Invoice receipts or iv) Weighing logs. [N.J.A.C. 7:27- 8.13(a)]	Recordkeeping by manual logging of parameter or storing data in a computer data system annually based on a 12 calendar month period. The permittee shall record the amount of Passaic RM 10.9 dredge sediment received per each shipment delivery or weight of dredge sediment processed and its minimum percent moisture level, in each calendar month per year. All records shall be kept on site or at the permittee's main office for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8.13(d)3]	None.
8	Maximum hourly NY-NJ Harbor dredge sediment processing rate <= 335 tons per hour (dry). [N.J.A.C. 7:27- 8.13(a)]	Monitored by material feed/flow monitoring each hour during operation based on maximum amount of dry weight dredge sediment processed per hour. [N.J.A.C. 7:27- 8.13(a)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once per calendar day during operation based on the maximum amount (dry basis) of dredge sediment processed per hour in the pug mill. All monitoring records shall be kept on-site or at the permittee's main office, for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8.13(d)3]	None.
9	Maximum hourly Passaic RM 10.9 dredge sediment processing rate <= 375 tons per hour (dry). [N.J.A.C. 7:27- 8.13(a)]	Monitored by material feed/flow monitoring each hour during operation based on maximum amount of dry weight dredge sediment processed per hour. [N.J.A.C. 7:27- 8.13(a)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once per calendar day during operation based on the maximum amount (dry basis) of dredge sediment processed per hour in the pug mill. All monitoring records shall be kept on-site or at the permittee's main office, for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8.13(d)3]	None.

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	Total amount of Department approved bulk additive materials used <= 200,000 tons/year, consisting of: i) Portland cement; ii) Lime/Limestone; iii) Lime kiln dust; iv) Cement kiln dust and/or v) Fly ash. [N.J.A.C. 7:27- 8]	Monitored by material feed/flow monitoring annually, based on a 12 calendar month period where the specifications and amount of bulk additive materials shall be determined as follow: i) Shipment manifest data; ii) Bill of lading, iii) Material Invoice receipts or iv) Weighing logs; and v) MSDS. [N.J.A.C. 7:27- 8]	Recordkeeping by manual logging of parameter or storing data in a computer data system annually based on 12 calendar month period. The permittee shall record the amount of each type of Department approved bulk additive material received per each shipment delivery or its weight, and MSDS, in each calendar month per year. All records shall be kept on site or at the permittee's main office for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8]	None.
11	Bulk additive materials shall be delivered pneumatically into storage bins. If they're delivered in super sacks they should be placed inside the storage bin. At no time should any bulk additive materials be dumped or otherwise left exposed to the atmosphere as a potential source of dust. [N.J.A.C. 7:27- 8]	Monitored by visual determination per delivery ensuring the transfer of bulk additive materials into storage bins is performed appropriately. [N.J.A.C. 7:27- 8]	None.	None.

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
12	There shall be no visible emissions from the storage and feeding of bulk additive materials, and from the processing of dredge sediment through the screens, hopper and the pugmill at anytime, exclusive of condensed water vapor, except for a period of not longer than three (3) minutes in any consecutive thirty (30) minute period. No visible emissions are equivalent to less than five percent (5%) opacity as determined using New Jersey Air Test Method 2 [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27-6.2(e)]	Monitored by visual determination once per calendar day during operation. For compliance with no visible emissions the permittee shall conduct daily visual inspections during daylight hours. Visual inspections shall consist of a visual survey of the screening plant, hopper, conveyors and pugmill to identify any visible emissions (other than condensed water vapor). If visible emissions are observed at any of these locations, the permittee shall do the following: (1) Verify that the storage and feeding of bulk additive materials, and the processing of dredge sediment through the screens, hopper, pugmill or conveyors that are causing visible emissions are performed in accordance with this permit and all its applicable conditions of approval. If not, the permittee shall take corrective action immediately to eliminate visible emissions. The permittee must also report immediately any permit violations to the Department. (2) If the corrective action taken in Step (1) does not correct the opacity problem within 24 hours, the permittee shall perform a check via a certified opacity reader, in accordance with New Jersey Air Test Method 2. Such test shall be conducted each day until corrective action successfully corrects the visible emission problem. [N.J.A.C. 7:27- 8.13(d)2]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event when visible emissions occur: (1) Date and time of visual inspection; (2) Emission Point number or location of visible emissions; (3) Operation status of the screening plant, hopper, conveyors and pugmill; (4) Observed results and conclusions; (5) Operation status of the baghouse and water spray system; (6) Description of corrective action taken, if needed; (7) Date and time a check via a certified opacity reader is performed; (8) Date and time opacity problem was solved (if applicable); (9) New Jersey Test Method 2 results, if conducted; and (10) Name of person(s) conducting the inspection. All records shall be kept on-site or at the permittee's main office for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8]	Submit a report: Upon occurrence of event over the allowable limit: The Permittee shall immediately implement corrective measures to prevent visible emissions and at the same time shall immediately report the incident time and date of occurrence, source or location of visible emissions and corrective measures taken by calling the Environmental Action Hotline at (877) 927-6337. The permittee shall cease operating the source causing visible emissions upon request by the NJDEP, Northern Regional Enforcement Office (NREO). [N.J.A.C. 7:27- 8]
13	The operation of any of the process equipment specified in this permit shall not cause any air contaminant, including an air contaminant detectable by the sense of smell, to be present in the outdoor atmosphere in such quantity and duration which is, or tends to be, injurious to human health or welfare, animal or plant life or property, or would unreasonably interfere with the enjoyment of life or property, except in areas over which the owner or operator has exclusive use or occupancy. [N.J.A.C. 7:27- 5]	None.	None.	Notify by phone: Upon occurrence of event Any operation of the equipment specified in this permit which may cause a release of air contaminant in a quantity or concentration which poses a potential threat to the public health, welfare, or the environment or which might reasonably result in citizen complaints shall be reported by the permittee as required by the Air Pollution Control Act by immediately calling the NJDEP Hotline at 1-877-927-6337. [N.J.S.A. 26: 2C-19.e]

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	The permittee shall identify and implement all actions necessary to keep the areas around the screens, hopper, conveyors, bulk additive material silos and pug mill, clean of dust and any spill of bulk additive materials or dredge sediment & debris. [N.J.A.C. 7:27- 8]	Monitored by visual determination once per calendar day during operation. Plant operators and field staff shall be instructed to report any spill of dredge sediment & debris or bulk additive materials on the ground, or if they notice dust emissions from any of the surrounding process equipment to the on-site project superintendent or management. [N.J.A.C. 7:27- 8]	Recordkeeping by manual logging of parameter or storing data in a computer data system once per calendar day during operation when any spill of bulk additive materials or dredge sediment & debris is observed around the screens, hopper, conveyors, silos and pug mill, including any subsequent spill mitigation measures taken, on-site, or at the permittee's main office, for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8]	None.
15	A water spray system shall be available on site and used as needed around the area where the amended dredge material or final product stockpile is stored. Furthermore, additional measures to control odors which may consist of odor control foam that has the ability to react with odorous (organic) compounds in dredge material and convert them into soluble surfactants, or similar odor control methodologies, shall be used when odors are detected off property that cause a nuisance, or upon request by the Department/NREO based on citizen odor complaints verified by the Department or Department delegated agency, or observations of the Department or Department delegated agency. [N.J.A.C. 7:27- 8]	Monitored by visual determination once per calendar day during operation for dust, ensuring that water spray bars located around the area where the amended dredge material or final product is stored are fully operable, and surveying the area for odors respectively. [N.J.A.C. 7:27- 8]	Recordkeeping by manual logging of parameter or storing data in a computer data system once per calendar day during operation specifying the following: i) Amount of amended dredge material or final product stored on site and ii) If dust or odor prevention and/or control measures are used. All records shall be kept on-site, or at the permittee's main office, for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8]	You must keep, and have readily available upon request by the Department: As per the approved schedule agreed with the NJDEP, Northern Regional Enforcement Office (NREO) or delegated agencies, a report describing odor control methodologies applied and whether any odor monitoring-detection devices, sampling or analytical tests are used. [N.J.A.C. 7:27- 8.4(d)4]

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	The permittee shall maintain the following conditions inside the loading barge, when applicable: 1. Dry or exposed dredge sediment and debris covered by a non-permeable plastic tarp when placed inside the barge during off-shift and overnight hours; or 2. A water spray system; and 3. An odor control foam that has the ability to react with odorous (organic) compounds in dredge sediment and convert them into soluble surfactants, or similar odor control methodologies, to be used when dust or odors are detected off property that cause a nuisance, or upon request by the Department/ NREO based on citizen odor complaints verified by the Department or Department delegated agency, or observations of the Department or Department delegated agency. [N.J.A.C. 7:27- 8]	Monitored by visual determination once per calendar day during operation for dust and surveyed for odors when a shipment of dredge sediment is delivered by barge. [N.J.A.C. 7:27- 8]	None.	None.
17	The designations of the NY-NJ Harbor and Passaic RM 10.9 dredging areas and the characterization of their dredge sediments, must be approved by the NJDEP, Office of Dredging and Sedimentation Technology (ODST) through the Acceptable Use Determination (AUD) or equivalent permitting procedures as amended or supplemented thereafter. [N.J.A.C. 7:27- 8]	Monitored by documentation of construction once initially and per change of designations of dredging areas as required by State permits et seq. [N.J.A.C. 7:27- 8]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially and per change of designations of dredging areas. All records shall be kept on site or at the permittee's main office for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8]	None.

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
18	Potential to emit of any other air contaminants including speciated HAPs, TXS, or criteria air pollutants that are not specified in this permit and reported by the permittee, shall be below their respective reporting threshold levels or de minimis as specified in N.J.A.C. 7:27-8 Appendix 1, Table A and B, or 0.05 lb/hr, whichever is applicable. [N.J.A.C. 7:27- 8]	Monitored by calculations annually, based on a 12 calendar month period when concentrations of each speciated HAP or TXS detected in dredge sediment from either the Passaic RM 10.9 and/or the NY-NJ Harbor area sources increase above their levels initially reported by the permittee. The permittee shall then perform a preliminary health risk screening of the parameters that are above their reporting threshold limits in N.J.A.C. 7:27-8 Appendix 1, Table A and B, or 0.05 lb/hr, whichever is applicable. The Department reserves the right to require additional analytical laboratory sampling & testing of the dredge sediment and/or performing secondary cancer health risk screening based on new data. [N.J.A.C. 7:27- 8]	Recordkeeping by manual logging of parameter or storing data in a computer data system annually based on 12-calendar month period, of dredge sediment analytical laboratory sampling & testing results and associated speciated HAPs, TXS emissions calculations, along with preliminary cancer health risk screening spreadsheet and designations of NY-NJ Harbor and Passaic River Mile 10.9 dredging areas. All records shall be kept on-site, or at the permittee's main office, for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8]	Submit a report: At a common schedule agreed upon by the operator and the Administrator per the Department's request, consisting of the following information to the NJDEP, Bureau of Preconstruction Permits, Mailcode: 401-02-P.O.Box 420, Trenton, NJ 08625-0420: 1.The designations of the NY-NJ Harbor and the Passaic River Mile 10.9, dredging areas; 2. Characterization and source of the dredge sediment processed at the facility; 3. Maximum hourly and yearly potential to emit calculations of VOC (total), HAPs, TXS and TSP/PM/PM-10; and 4. Preliminary cancer health risk spreadsheet, if applicable.. [N.J.A.C. 7:27- 8]
19	Maximum No. of Billable Compliance Inspections <= 5 inspections. The equipment covered by this permit will be subject to inspection fees for the maximum periodic compliance inspections (as defined in N.J.A.C. 7:27-8.1) over the life of the permit, after it receives final approval for a five year duration. The permittee will be invoiced a service fee per inspection after the periodic compliance inspection is conducted, pursuant to N.J.A.C. 7:27-8.6 under B, Supplementary Fee Schedule, item no. 13, or as amended or supplemented thereafter. [N.J.A.C. 7:27- 8]	None.	None.	None.

CLEAN EARTH DREDGING TECHNOLOGY INC (12943)

Date: 6/27/2013

PCP130002

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Emission Unit: U1 Processing of dredge material through a pugmill.

OS1 Hopper/Screening Plant

Operating Scenario:

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The hopper-screener shall be enclosed on all sides except at the end in order to minimize the surface area exposed to the atmosphere, where plastic flaps allow coarse materials, scrap metals, debris or large rocks to fall onto the covered conveyor, [N.J.A.C. 7:27-8.13(h)]	Monitored by visual determination once initially, based on an instantaneous determination. [N.J.A.C. 7:27- 8]	None.	None.

PCP130002

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Emission Unit: U1 Processing of dredge material through a pugmill.
OS2 Pugmill Feed Conveyor, OS3 Hoppers/Additive Conveyor.

Operating Scenario:

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The pug mill feed conveyors shall be fully covered from the point of injection of bulk additives through the drop point into the pug mill. However, up to five-(5) feet long section of a conveyor may be left uncovered, so that the unloading of amended dredge material could be observed. The conveyors shall have skirts and material transfer points shall have sheet metal or heavy tarps bolted to the equipment, or equivalent. As an alternative to covering the pug mill feed conveyors, the permittee may install a wet suppression system similar to the one installed on the radial stacking conveyor (E6) that would be used as needed so to maintain the dredge sediment moist at all times. [N.J.A.C. 7:27- 8.13(h)]	Monitored by visual determination once initially, based on an instantaneous determination. [N.J.A.C. 7:27- 8]	None.	None.
2	The injection of bulk additive materials on the pug mill feed conveyor and its pre-mixing with dredge sediment should stop if the baghouse (CD1) is shutdown due to malfunction or maintenance/repair. [N.J.A.C. 7:27- 8]	Monitored by visual determination once per calendar day during operation ensuring prior to injection of bulk additive materials that the baghouse (CD1) is operable as permitted. [N.J.A.C. 7:27- 8]	None.	None.
3	The headspace within the enclosed pugmill feed conveyor (E2) and the hoppers/additive conveyor (E3) shall be vented through the pug mill baghouse (CD1) at all times. [N.J.A.C. 7:27- 8]	Monitored by visual determination once initially, based on an instantaneous determination. [N.J.A.C. 7:27- 8]	None.	None.

CLEAN EARTH DREDGING TECHNOLOGY INC (12943)

Date: 6/27/2013

PCP130002

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Emission Unit: U1 Processing of dredge material through a pugmill.

OS4 Bulk Additive Feeders

Operating Scenario:

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The mixing of dredge sediment with bulk additive materials must take place at ambient temperatures, where no heat or convection air are applied. [N.J.A.C. 7:27-8]	Monitored by visual determination once initially, based on an instantaneous determination. [N.J.A.C. 7:27- 8]	None.	None.

PCP130002

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Emission Unit: U1 Processing of dredge material through a pugmill.

OS5 Mixing of dredge material plus additives in pugmill

Operating Scenario:

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The headspace within the pug mill shall be vented through the baghouse (CD1) while processing dredge sediment. [N.J.A.C. 7:27-8]	Monitored by visual determination once initially, based on an instantaneous determination. [N.J.A.C. 7:27- 8]	None.	None.
2	Bulk additive materials shall be charged through a flanged enclosed dust leakproof bucket conveyor or chute straight into the pug mill from the silo installed on top of the pug mill. [N.J.A.C. 7:27- 8]	Monitored by visual determination once initially, based on an instantaneous determination. [N.J.A.C. 7:27- 8]	None.	None.
3	There must be sufficient dredge sediment added to the pug mill prior to charging bulk additive materials to allow for better mixing of the dredge sediment and bulk additives and to minimize the possibilities that large voids are present where bulk additives are injected. [N.J.A.C. 7:27- 8]	Monitored by visual determination once per calendar day during operation. [N.J.A.C. 7:27- 8]	None.	None.
4	VOC (Total) <= 3.45 lb/hr. [N.J.A.C. 7:27-8]	VOC (Total): Monitored by calculations at the approved frequency, based on a 12 calendar month period when VOC (total) and SVOC (total) concentrations in dredge sediment from either the Passaic RM 10.9 and/or the NY-NJ Harbor increase above their levels initially reported by the permittee. [N.J.A.C. 7:27- 8]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency based on a 12-calendar month period, of dredge sediment analytical laboratory sampling & testing results and associated VOC (total) and SVOC (total) emissions calculations, including the designations of NY-NJ Harbor and Passaic River Mile 10.9 dredging areas. All records shall be kept on-site, or at the permittee's main office, for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8]	None.

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	TSP <= 1.1 lb/hr. [N.J.A.C. 7:27- 8]	TSP: Monitored by calculations at the approved frequency, based on a 12 calendar month period when the percent moisture (%M) in dredge sediment from either the Passaic RM 10.9 and/or the NY-NJ Harbor decrease below 50% as initially reported by the permittee. [N.J.A.C. 7:27- 8]	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency based on a 12-calendar month period, of dredge sediment analytical laboratory sampling & testing results and associated TSP-PM emissions calculations, including the designations of NY-NJ Harbor and Passaic River Mile 10.9 dredging areas. All records shall be kept on-site, or at the permittee's main office, for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8]	None.
6	PM-10 (Total) <= 1.05 lb/hr. [N.J.A.C. 7:27- 8]	PM-10 (Total): Monitored by calculations at the approved frequency, based on a 12 calendar month period when the percent moisture (%M) in dredge sediment from either the Passaic RM 10.9 and/or the NY-NJ Harbor decrease below 50% as initially reported by the permittee. [N.J.A.C. 7:27- 8]	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency based on 12-calendar month period, of dredge sediment analytical laboratory sampling & testing results, and associated PM-10 emissions calculations, including the designations of NY-NJ Harbor and Passaic River Mile 10.9 dredging areas. All records shall be kept on-site, or at the permittee's main office, for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8]	None.

CLEAN EARTH DREDGING TECHNOLOGY INC (12943)

Date: 6/27/2013

PCP130002

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Emission Unit: U1 Processing of dredge material through a pugmill.

OS6 Radial Stacking Conveyor

Operating Scenario:

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The amended dredge material shall be sprayed with water (CD3) as needed when it is dropped from the pug mill onto the radial stacking conveyor (E6), so that it is maintained moist at all times. [N.J.A.C. 7:27- 8]	Monitored by visual determination once per calendar day during operation ensuring that water spray is being injected as needed while amended dredge material is being unloaded onto the radial stacking conveyor (E6). [N.J.A.C. 7:27- 8]	Recordkeeping by manual logging of parameter or storing data in a computer data system once per calendar day during operation when water spray is not used or any corrective measures taken to mitigate the potential of visible emissions. All records shall be kept on-site, or at the permittee's main office, for at least five (5) years, readily made available to the Department or its representatives upon request. [N.J.A.C. 7:27- 8]	None.

**New Jersey Department of Environmental Protection
Reason for Application**

Permit Being Modified

Permit Class: PCP **Number:**90001

Description of Modifications: Clean Earth Dredging Technologies, Inc. ("CEDTI") seeks to obtain a modification to its construction/operating permit for the dredge processing facility, located near Fish House Road at the Koppers Seaboard facility in Kearny, NJ. Currently, this facility recycles non-hazardous dredge material from the NY-NJ Harbor. CEDTI wishes to process derdged material from other sources in the New York/New Jersey area. This application is based upon dredged material to be processed obtained from the Lower Passaic River - River Mile 10.9 Sediment Removal Project and will consist of 18,000 cubic yards of material. CEDTI creates a reusable product by combining fly ash, portland cement, and/or other materials with the dredge. All equipment on site are powered by electricity. No diesel engines are associated with this process. No equipment will be added to the currently permitted process.

New Jersey Department of Environmental Protection
Facility Profile (General)

Facility Name (AIMS): Clean Earth Dredging Technology, Inc.

Facility ID (AIMS): 12943

Street NEAR FISH HOUSE RD
Address: KOPPERS SEABOARD SITE
KEARNY, NJ 07032

Mailing 334 SOUTH WARMINSTER RD
Address: HATBORO, PA 19040

County: Hudson

Location
Description:

State Plane Coordinates:

X-Coordinate:

Y-Coordinate:

Units:

Datum:

Source Org.:

Source Type:

Industry:

Primary SIC: 3295

Secondary SIC:

NAICS:

**New Jersey Department of Environmental Protection
Facility Profile (General)**

Contact Type: Air Permit Information Contact

Organization: Compliance Plus Services, Inc.

Org. Type: Corporation

Name: Michael D. Logan

NJ EIN:

Title: Vice President, Environmental Services

Phone: (215) 734-1414 x

Mailing Address: P.O. Box 186

Fax: (215) 734-1424 x

Hatboro, PA 19040

Other: () - x

Type:

Email: mlogan@cps-2comply.com

Contact Type: BAQE - Engineering

Organization: N.J. Department of Environmental Protection

Org. Type: State

Name: Negib Harfouche, Ph.D

NJ EIN:

Title: Environmental Engineer 3 (Principal)

Phone: (609) 292-2137 x

Mailing Address: Bureau of Air Permits (BAP)

Fax: (609) 984-6369 x

401 East State Street - 2nd Floor

Other: () - x

Mailcode: 401-02-P.O.Box 420

Trenton, NJ 08625-0420

Type:

Email: negib.harfouche@dep.state.nj.us

Contact Type: Consultant

Organization: Compliance Plus Services, Inc.

Org. Type: Corporation

Name: Michael D. Logan

NJ EIN:

Title: Vice President, Environmental Services

Phone: (215) 734-1414 x

Mailing Address: P.O. Box 186

Fax: (215) 734-1424 x

Hatboro, PA 19040

Other: () - x

Type:

Email: mlogan@cps-2comply.com

**New Jersey Department of Environmental Protection
Facility Profile (General)**

Contact Type: Fees/Billing Contact

Organization: Clean Earth Dredging Technologies, Inc. **Org. Type:** Corporation
Name: Dan Morrow **NJ EIN:**
Title: Environmental Manager
Phone: (215) 734-1000 x **Mailing Address:** 334 South Warminster Road
Fax: () - x Hatboro, PA 19040
Other: () - x
Type:
Email: dmorrow@cleanearthinc.com

Contact Type: On-Site Manager

Organization: Clean Earth Dredging Technology, Inc. **Org. Type:** Corporation
Name: Ken Sykes **NJ EIN:**
Title: Manager
Phone: (215) 734-1400 x **Mailing Address:** 1 Linden Avenue East
Fax: () - x Jersey City, NJ 07305
Other: () - x
Type:
Email:

Contact Type: Responsible Official

Organization: Clean Earth Dredging Technologies, Inc. **Org. Type:** Corporation
Name: Dan Morrow **NJ EIN:**
Title: Environmental Manager
Phone: (215) 734-1000 x **Mailing Address:** 334 South Warminster Road
Fax: () - x Hatboro, PA 19040
Other: () - x
Type:
Email: dmorrow@cleanearthinc.com

**New Jersey Department of Environmental Protection
Equipment Inventory**

Equip. NJID	Facility's Designation	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand- Fathered	Last Mod. (Since 1968)	Equip. Set ID
E1	Hopper/Scree	850 (wet) tons per hour feed hopper/screening plant	Manufacturing and Materials Handling Equipment			No		
E2	Conveyor1	48" x 180' pugmill feed conveyor	Manufacturing and Materials Handling Equipment			No		
E3	Conveyor2	30" x 35' propat conveyor	Manufacturing and Materials Handling Equipment			No		
E4	Feeder	Bulk Additive Feeders	Manufacturing and Materials Handling Equipment			No		
E5	Pugmill	840 ton per hour (wet) pugmill mixing unit with enclosed mixing box	Manufacturing and Materials Handling Equipment			No		
E6	Conveyor3	48" x 120' radial stacking conveyor	Manufacturing and Materials Handling Equipment			No		

CLEAN EARTH DREDGING TECHNOLOGY INC (12943)
PCP130002

Date: 6/27/2013

**New Jersey Department of Environmental Protection
Control Device Inventory**

CD NJID	Facility's Designation	Description	CD Type	Install Date	Grand-Fathered	Last Mod. (Since 1968)	CD Set ID
CD1	Fug Collect1	IAC 120TB-BHT-49:S6	Particulate Filter (Baghouse)		No		
CD2	Conv. Encl	Conveyor Enclosures	Other		No		
CD3	Spray Bar	Water Spray Bar	Other		No		

CLEAN EARTH DREDGING TECHNOLOGY INC (12943)
PCP130002

Date: 6/27/2013

New Jersey Department of Environmental Protection
Emission Points Inventory

PT NJID	Facility's Designation	Description	Config.	Equiv. Diam. (in.)	Height (ft.)	Dist. to Prop. Line (ft)	Exhaust Temp. (deg. F)			Exhaust Vol. (acfm)			Discharge Direction	PT Set ID
							Avg.	Min.	Max.	Avg.	Min.	Max.		
PT1	PT1	Drop Point from Hopper/Screenerto ground (oversized material)	Rectangle	19	6	880	54.0	33.0	95.0	1.0	0.0	1.5	Up	
PT2	PT2	Drop Point into Bulk Additive Hoppers	Rectangle	256	6	880	54.0	33.0	95.0	1.0	0.0	1.5	Up	
PT3	PT3	Drop Point from Bulk Additive Hoppers onto conveyor2	Rectangle	15	6	880	54.0	33.0	95.0	1.0	0.0	1.5	Up	
PT4	PT4	Drop Point from Conveyor2 to conveyor1	Rectangle	15	6	880	54.0	33.0	95.0	1.0	0.0	1.5	Up	
PT5	PT5	Drop point from conveyor1 to pugmill	Rectangle	19	6	880	54.0	33.0	95.0	1.0	0.0	1.5	Up	
PT6	PT6	Drop Point from pugmill to conveyor3	Rectangle	19	30	880	54.0	33.0	95.0	1.0	0.0	1.5	Up	
PT7	PT7	Drop Point from conveyor3 to temporary stockpile	Rectangle	48	22	880	54.0	33.0	95.0	1.0	0.0	1.5	Up	
PT8	PT8	8' x 20' double deck screening plant with fingers	Rectangle	171	8	880	54.0	33.0	95.0	1.0	0.0	1.5	Up	
PT9	PT9	Drop Point from hopper/screener to Conveyor1	Rectangle	19	6	880	54.0	33.0	95.0	1.0	0.0	1.5	Up	

CLEAN EARTH DREDGING TECHNOLOGY INC (12943)
PCP130002

Date: 6/27/2013

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 1 Processing of dredge material through a pugmill.

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours		VOC Range	Flow (acfm)		Temp. (deg F)	
								Min.	Max.		Min.	Max.	Min.	Max.
OS1	Hopper/Scree	Hopper/Screening Plant	Normal - Steady State	E1		PT1	5-03-008-99	0.0	8,760.0		0.0	1.5	33.0	95.0
OS2	Conveyor1	Pugmill Feed Conveyor	Normal - Steady State	E2	CD2 (P)	PT5	5-03-008-99	0.0	8,760.0		0.0	1.5	33.0	95.0
OS3	Conveyor2	Hoppers/Additive Conveyor.	Normal - Steady State	E3	CD2 (P)	PT4	5-03-008-99	0.0	8,760.0		0.0	1.5	33.0	95.0
OS4	AdditiveFeed	Bulk Additive Feeders	Normal - Steady State	E4	CD2 (P)	PT2 PT3	5-03-008-99	0.0	8,760.0		0.0	1.5	33.0	95.0
OS5	Pugmill	Mixing of dredge material plus additives in pugmill	Normal - Steady State	E5	CD1 (P)	PT5 PT6	5-03-008-99	0.0	3,200.0		0.0	1.5	33.0	95.0
OS6	Conveyor3	Radial Stacking Conveyor	Normal - Steady State	E6	CD3 (P)	PT7	5-03-008-99	0.0	3,200.0		0.0	1.5	33.0	95.0

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ATTACHMENT "B" PROCESS AND TREATMENT EQUIPMENT PROFILE



ATTACHMENT "C" DECANT WATER STORAGE TANK CUT SHEET



Technical Information Manual

2.7.1

PRODUCT DATA SHEET

January, 2007

FRAC TANK

GENERAL INFORMATION

This tank is sloped downward from working surface at rear of tank to the front. The rear axle is fixed to the tank (permanent).

WEIGHTS AND MEASURES

» Capacity:	500 BBL (21,000 gal.)
» Height:	Front: 8'-9", Rear: 12'-8" Handrail up: 15'-8"
» Width :	8'-0"
» Length:	34'-6" (tank only) 37'-2" (overall)
» Weight:	18,000 lbs. (est.)

STRUCTURAL DESIGN

» Floor:	Carbon steel
» Sides/Ends:	Carbon steel
» Top Deck:	Carbon steel
» Internal Cross Bracing:	Round stock, 3/4" - 7/8" depending on manufacturer

FEATURES

» Manifold:	Some are equipped, some are not
» Valves:	Rear: one (1) - 4" butterfly valve Front Fill: one (1) - 4" butterfly valve Front Manifold: four (4) - butterfly valves
» Relief Valve:	Standard style: None Safety Vapor style: Buna-N seal, 16 oz. Pressure setting, 0.4 oz. Vacuum setting

FEATURES - cont.

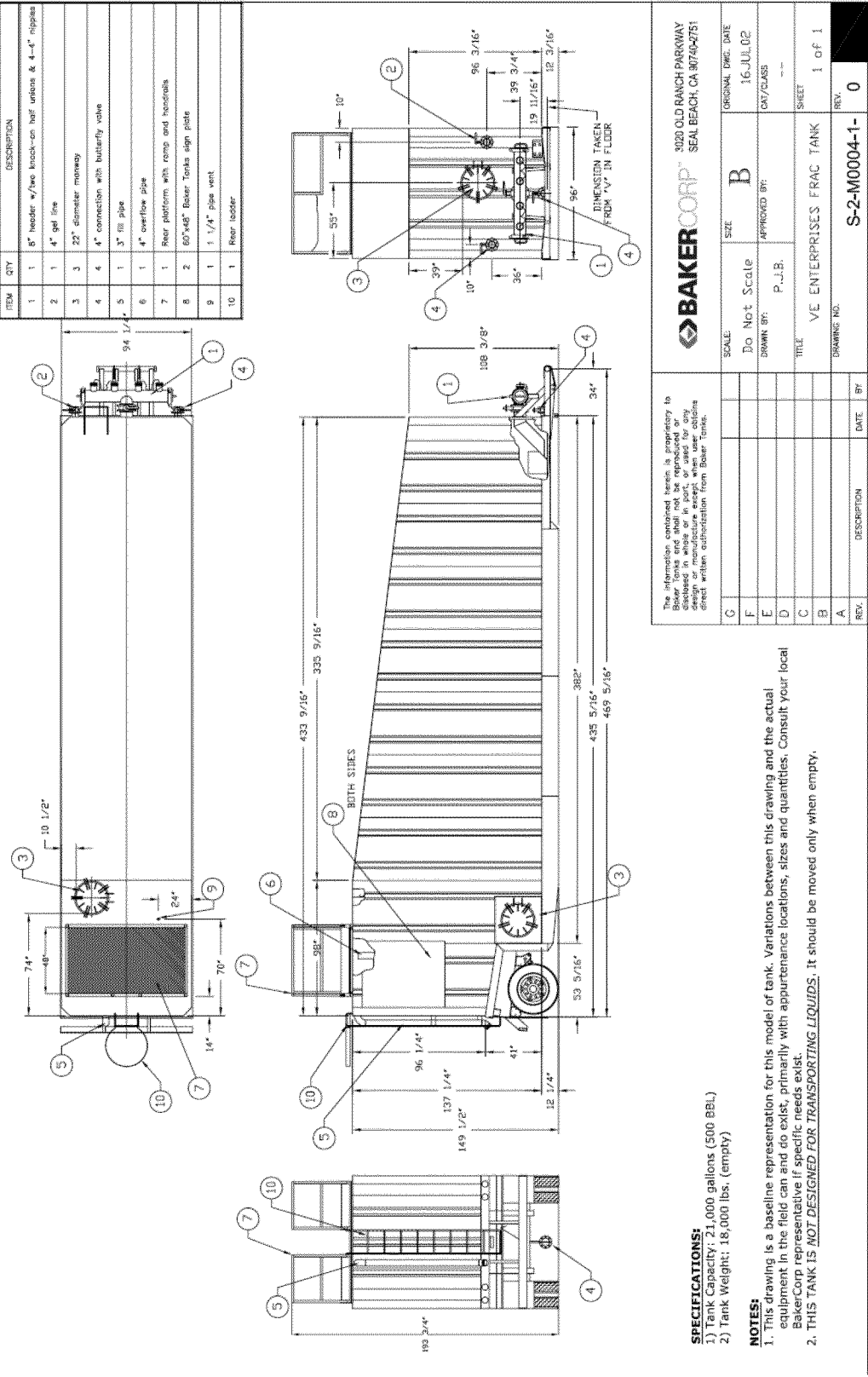
» Top Access:	One (1) access door
» Front Access:	One (1) access door
» Side Access:	One (1) access door (passenger side)
» Guardrails:	At rear platform only
» Exterior Ladder:	One (1) at rear of tank
» Internal Ladder:	One (1) located at top access door
» Front Drain:	One (1) 4" connection
» Rear Flush:	One (1) 4" capped nipple
» Level Gauge:	None
» Rear Wheels:	Fixed axle
» Overflow:	One (1) 3" overflow pipe at rear of tank
» Vent:	Original design tanks have flip open hatch

SURFACE DETAILS

» Exterior Coating:	High gloss polyurethane
» Interior Coating:	Both lined & unlined available. Consult your local Baker representative.

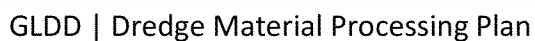
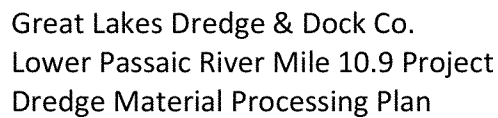
TESTS/CERTIFICATIONS

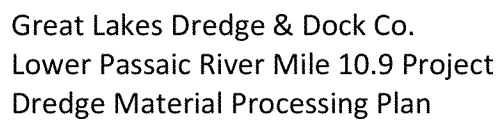
» Test Performed:	Scheduled QMS inspections
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ATTACHMENT “D” EQUIPMENT LOCATION PLAN





The drawing includes three main views: an isometric view of the container, a floor detail, and a tarp detail.

Isometric View: Shows the container's dimensions: 102" width, 36" depth, and 78" height. The center of apertures is 230 1/2" along the length and 238 1/2" along the width. The center of apertures is 89" apart. A detail of the corner post shows it is 93" I.D. container, 70 1/2" I.D. container, and 229" I.D. container.

Floor Detail: Shows the floor structure with labels: CORNER POST, STIFFENER, FLOOR SHEET, CROSSMEMBER, and CASTING. Dimensions include 20" for the corner post, 1 1/2" for the stiffener, and 1/4" for the casting.

Tarp Detail: Shows the tarp structure with labels: CASTING, STRAP, TARP RAIL, and TOP RAIL. Dimensions include 12" for the strap, 2 1/4" for the tarp rail, and 3" for the top rail.

Container Information: 32 CU. YD. INTERMODAL CONTAINER. ACCURATE. 55A. 0149A. 8/26/80. 65A0146A.

